

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A content-providing server for executing content transmission to a client and content recording processing, the server comprising:

a tuner for executing data reception processing;

a data transmitter/receiver transmission/reception unit for executing communication processing between the server and a client, wherein the communication processing includes communication of control information and content received by the tuner, the received content including a first content received by the tuner over a first channel and a second content received by the tuner over a second channel, the first channel being associated with a first Uniform Resource Locator (URL) and the first content being received by accessing the first URL, the second channel being associated with a second Uniform Resource Locator (URL) and the second content being received by accessing the second URL:

a memory device including:

a metadata storage unit including storing attribute information corresponding to the received content, wherein the attribute information is stored as content information; and

a content storage unit for storing the received content in an hierarchical content management directory, wherein the metadata storage unit includes information describing the hierarchical management directory;

a content manager management unit for processing the content information to be provided to the client; and

a content deliverer delivery control unit for processing the received content, the content delivery control unit deliverer comprising:

a tuner control instance for arranging the first content and the second content as a unit of content by aggregating the first URL and the second URL to generate a combined URL that provides access to the unit of content, wherein a recording source content identifier is set corresponding to the unit of content, and the recording source content identifier is the combined URL a channel list Uniform-Resource-Locator (URL); and

a storage [[unit]] control instance for storing the unit of content, wherein a recording target content identifier is set corresponding to the unit of content,

wherein the data transmitter/receiver transmission/reception unit uses the channel list combined URL to provide access to the first content and the second content to the client by establishing a connection between the server and the client, and

wherein the provided channel list combined URL is used to switch between the first content and the second content by maintaining the connection and without setting a new URL to switch from the first content that is received over the first channel to the second content that is received over the second channel.

2. (Currently Amended) The content-providing server according to claim 1, wherein the recording source content identifier is included in the storage [[unit]] control instance,

and the storage [[unit]] control instance processes the first content and the second content based on the recording source content identifier.

3. (Currently Amended) The content-providing server according to claim 1, wherein the content manager management unit processes the content information based on the content management directory, and wherein the tuner control instance and the storage [[unit]] control instance set the recording source content identifier and the recording target content identifier based on a request from the client.

4. (Currently Amended) The content-providing server according to claim 1, wherein the channel-list combined URL identifies a channel list including the first channel and the second channel, and wherein the first content and the second content is provided to the client based on a control request received from the client, the control request including the channel-list combined URL.

5. (Currently Amended) The content-providing server according to claim 1, wherein the recording source content identifier identifies a content storage object included in the content storage [[unit]].

6. (Currently Amended) The content-providing server according to claim 1, wherein the content manager management unit is configured to store setting information corresponding to the received content, the setting information including time information

and recording quality information, and wherein the recording target content identifier is set based on the setting information.

7. (Currently Amended) The content-providing server according to claim 1, wherein the content management unit manager is configured to set a content storage object URL as the metadata.

8. (Previously Presented) The content-providing server according to claim 1, wherein the first content is live content, and providing the first content includes live streaming of the first content to the client.

9. (Previously Presented) The content-providing server according to claim 1, wherein the recording target content identifier includes a content storage object URL.

10. (Currently Amended) The content-providing server according to claim 1, wherein the content information includes protocol information including a function ID to identify the tuner, the function ID being used to determine the tuner control instance and the storage [[unit]] control instance.

11. (Currently Amended) The content-providing server according to claim 1, wherein the content deliverer delivery-control-unit is configured to set a control instance that is configured to manage a connection between the server and the client based on a

connection management table corresponding to an instance ID, the instance ID identifying the tuner control instance and the storage [[unit]] control instance.

12. (Currently Amended) The content-providing server according to claim 1, wherein the content deliverer delivery-control-unit receives a Simple Object Access Access (SOAP) protocol content request from the client.

13. (Currently Amended) An information processing device requesting content received by a tuner in a server, the information processing device comprising:

a memory device storing instructions; and

a processor executing the instructions sending first protocol information including a function ID identifying the tuner receiving the content, and second protocol information including a data storage unit function ID identifying a storage unit of the server storing the content received by the tuner, wherein the content received by the tuner includes a first content received by the tuner over a first channel and a second content received by the tuner over a second channel, the first content and the second content being arranged in an hierarchical content management directory described by metadata stored in the server; an input device for receiving the first content and the second content based on the first protocol information and the second protocol information sent to the server, the first content and the second content being received as a unit of content over a connection established with the server, wherein a recording source content identifier that is set corresponding to the unit of content is used to receive the first content and the second content, and the recording source content identifier is a-

channel list Uniform Resource Locator (URL); and an outputting device for outputting the first content and the second content, wherein the processor switches between the first content and the second content based on the channel list URL, the switching being performed by maintaining the connection and without using a new URL to switch from the first content that is received over the first channel to the second content that is received over second first channel for:

receiving, by the tuner, content over a plurality of channels, the received content including a first content received by the tuner over a first channel and a second content received by the tuner over a second channel, the first channel being associated with a first Uniform Resource Locator (URL) and the first content being received by accessing the first URL, the second channel being associated with a second Uniform Resource Locator (URL) and the second content being received by accessing the second URL;

storing the received content in a hierarchical content management directory;

storing metadata including attribute information associated with the received content, the metadata including information describing the hierarchical content management directory;

arranging the first content and the second content as a unit of content by aggregating the first URL and the second URL to generate a combined URL that provides access to the unit of content;

setting a recording source content identifier associated with the unit of content and used by a tuner control instance, wherein the tuner control instance is used

to send the received content to a client, and the record source content identifier is the combined URL;

setting a recording target content identifier to be used by a storage control instance to control the storing of the received content;

receiving, from the client, a control request identifying the tuner control instance or the storage unit control instance; and

providing access to the first content and the second content to the client by using the combined URL over a connection established between the server and the client, wherein the combined URL is used to switch between the first content and the second content by maintaining the connection and without setting a new URL to switch from the first content that is received over the first channel to the second content that is received over the second channel.

14. (Previously Presented) The information processing device according to claim 13, wherein the processor sends a request to set the recording source content identifier, the recording source content identifier being used by a control instance of the tuner to execute content control.

15. (Previously Presented) The information processing device according to claim 13, wherein the processor sends a request to set a recording target content identifier.

16. (Currently Amended) An information processing method for executing processing of content received from a tuner in a server, the method comprising:

receiving, by the tuner, content over a plurality of channels, the received content including a first content received by the tuner over a first channel and a second content received by the tuner over a second channel, the first channel being associated with a first Uniform Resource Locator (URL) and the first content being received by accessing the first URL, the second channel being associated with a second Uniform Resource Locator (URL) and the second content being received by accessing the second URL;

storing the received content in a hierarchical content management directory;

storing metadata including attribute information associated with the received content, the metadata including information describing the hierarchical content management directory;

arranging the first content and the second content as a unit of content by aggregating the first URL and the second URL to generate a combined URL that provides access to the unit of content;

setting a recording source content identifier associated with the unit of content and used by a tuner control instance, wherein the tuner control instance is used to send the received content to a client, and the record source content identifier is the combined URL a-channel list Uniform Resource Locator (URL);

setting a recording target content identifier to be used by a storage unit control instance to control the storing of the received content;

receiving, from the client, a control request identifying the tuner control instance or the storage unit control instance; and

providing access to the first content and the second content to the client by using the channel list combined URL over a connection established between the server

and the client, wherein the provided channel list combined URL is used to switch between the first content and the second content by maintaining the connection and without setting a new URL to switch from the first content that is received over the first channel to the second content that is received over the second channel.

17. (Previously Presented) The information processing method according to claim 16, further comprising:

setting the recording source content identifier used by a recording unit control instance.

18. (Previously Presented) The information processing method according to claim 16, further comprising:

storing the recording target content identifier as the metadata; and
processing the metadata based on a request from the client.

19. (Currently Amended) The information processing method according to claim 16, wherein the channel list combined URL identifies the first channel and the second channel.

20. (Previously Presented) The information processing method according to claim 16, wherein the recording target content identifier identifies a content storage object included in a content storage region in the server.

21. (Previously Presented) The information processing method according to claim 16, further comprising:

processing setting information associated with the received content, the setting information including time information and recording quality information, wherein the recording target content identifier is set based on the setting information.

22. (Previously Presented) The information processing method according to claim 16, further comprising:

setting a content storage object URL as the metadata.

23. (Previously Presented) The information processing method according to claim 16, wherein the first content is live content and providing the first content includes live streaming of the first content to the client.

24. (Previously Presented) The information processing method according to claim 23, wherein the recording target content identifier includes a content storage object URL.

25. (Previously Presented) The information processing method according to claim 16, further comprising:

setting protocol information associated with the received content, the protocol information including a function ID to identify the tuner control instance and the storage unit control instance.

26. (Previously Presented) The information processing method according to claim 16, further comprising:

setting a control instance configured to manage a connection between the server and the client based on a management table corresponding to an instance ID, the instance ID identifying the tuner control instance and the storage unit control instance.

27. (Previously Presented) The information processing method according to claim 16, wherein the control request, received from the client, is based on a SOAP protocol.

28-32. (Cancelled).

33. (Currently Amended) A non-transitory computer-readable storage medium storing a program that, when executed on a processor of a server, causes the processor to perform a method for executing processing of content received by a tuner in the server, the method comprising:

receiving, by the tuner, content over a plurality of channels, the received content including a first content received by the tuner over a first channel and a second content received by the tuner over a second channel, the first channel being associated with a first Uniform Resource Locator (URL) and the first content being received by accessing the first URL, the second channel being associated with a second Uniform Resource Locator (URL) and the second content being received by accessing the second URL; storing the received content in a hierarchical content management directory;

storing metadata including attribute information corresponding to the received content, the metadata including information describing the hierarchical content management directory;

arranging the first content and the second content as a unit of content by aggregating the first URL and the second URL to generate a combined URL that provides access to the unit of content;

setting a recording source content identifier corresponding to the unit of content and being used by a tuner control instance, wherein the tuner control instance is used to send the received content to a client, and the record source content identifier is the combined URL a-channel list Uniform Resource Locator (URL);

setting a recording target content identifier used by a storage unit control instance to control the storing of the received content;

receiving, from the client, a control request identifying the tuner control instance or the storage unit control instance; and

providing access to the first content and the second content to the client by using the channel-list combined URL over a connection established between the server and the client, wherein the provided-channel list combined URL is used to switch between the first content and the second content by maintaining the connection and without setting a new URL to switch from the first content that is received over the first channel to the second content that is received over the second channel.

34. (Canceled).